REMARKS/ARGUMENTS

A typographical error on page 19 has been corrected.

This amendment is submitted in response to the Final Office Action mailed June 6, 2006. Claims 1 and 18 are amended to more clearly recite features of the claimed invention. Claims 2, 10, 19 and 24 have been cancelled. Claims 1, 3-9, 11-18, 20-23 and 25-28 remain pending in the application. Care has been taken to ensure that no new subject matter has been added by the amendments. Applicant respectfully requests allowance of all pending claims in view of the following remarks.

Rejections under 35 USC § 102

The Examiner rejected all of the claims under 35 USC § 102(e) as being anticipated by United States Patent No. 6,594,268 to Aukia et al. (Aukia). Applicant respectfully traverses the Examiner's rejection.

To further the prosecution of the present application, independent claims 1 and 18 have been amended to clarify the claimed subject matter. In particular, claim 1 as amended now recites a system including *"a latency classifier adapted to route each traffic stream to a selected path optimized to satisfy latency requirements most closely matching a respective latency requirement of the traffic stream;* <u>*at least two prioritization classifiers, each prioritization classifier is associated with one of the at least two diverse paths,*</u> *each prioritization classifier adapted to control a priority of the traffic stream being conveyed through the respective path; and* <u>*wherein the traffic streams within each of the at least two diverse paths are processed independently.*</u>*"* The amendments incorporate subject matter of cancelled claims 2 and 10. Independent method claim 18 has been amended in a similar manner incorporating subject matter of cancelled claims 19 and 24.

In the response submitted March 28, 2006, Applicant asserted that the present invention differs from Aukia in that at least two diverse paths are mapped through the switch fabric from a common input interface to a common output interface, each path optimized to satisfy respective different latency requirements. In the Office Action dated June 6, 2006 the Examiner asserted that Aukia disclosed *"...QoS based multi-path routing with different ones of the sets of traffic allocated to different path through the switch...and further disclosed that the switch common input interface...to a common output interface...for both multiplexed and non-multiplexed flows"* and therefore the Examiner does not consider Applicant's argument persuasive.

Applicant submits that the claimed subject matter of the present invention clearly differs and is not disclosed by Aukia. In the Office Action the Examiner's anticipation rejection is primarily supported with reference to elements of Fig. 2 and the associated description. In reviewing the disclosure Applicant does not agree that Aukia discloses all the Applicant's claimed invention. For example, Aukia disclose processing the traffic stream at a common input interface 204, classifying the packet 203, buffering the packet 205 and using a route allocation processor 206 to send the packet to the output interface 206 as shown in Fig. 2. The routing processor 202 provides for an adaptive routing calculation, and also possibly new weighting calculations, to determine new routing provisioning entries and weights based on QoS-guarantee provisioning and network topology information stored within the processing section 200. (col. 11 lines 5-9) The packet classifier 203 contains one or more packet filters determining filter rules to be applied to each packet received. (col. 10 lines 14-16) All packets entering the router of Aukia go through the same packet classifier 203 which determines the route allocation 206. Once the packet is assigned to the route, no further processing occurs when the packet is placed on the output link interface 207. (col. 9 lines 60 to 66, col. 10 lines 3 to 23) Aukia discloses a single traffic processing flow through their described invention as evident in Fig. 2. This results in individual packets from a traffic stream being routed to a specific path. Once the packet is allocated to a path no further classification or processing occurs and all filtering, classification, prioritization of the traffic stream must be done before route selection, and in fact the steps determine the outgoing route in Aukia.

In contrast the present invention provides for further processing of the traffic stream once the defined path is selected wherein each path is processed independently once they are classified by latency and routed to the appropriate path. Once the latency of the traffic has been determined and the appropriate path through the switch fabric, the traffic streams can then be individually prioritized based upon requirements specific to the mapped path. The independent processing facilitates further classification to achieve desired QoS objectives for the specific traffic streams which is not possible in Aukia.

The Examiner asserts that Fig. 8 and column 17, lines 64-67 to column 18, lines 1-44 disclose that "...for path selection process comprises a respective prioritization classifier adapted to control a priority (TOS field of packet header) of each traffic stream being conveyed through the path" (Page 4 second paragraph). Applicant submits Aukia do not contemplate or disclose prioritizing each path and the associated traffic stream independently once the selected path through the switch fabric has been determined. Fig. 8 of Aukia and the

associated description describe how to create provisioning entries to determine filter rules for route (path) selection to be applied to the incoming traffic. There is no suggestion by Aukia of defining paths through the switch fabric but rather routing packets into a network based upon packet filters determined by classification of packet flows is disclosed. Once the route is determined for the packet flow, no further processing is performed on the traffic stream which is clearly different to the present invention as claimed.

It is submitted that the present invention is directed to efficiently transporting traffic flows with differing latency requirement across a common switch fabric. Paths are mapped through the switch infrastructure with each path optimized to satisfy respective different latency requirements. Traffic streams entering the input interface are classified based upon latency requirements and routed to the path which best meets the latency requirements of the data. The traffic streams associated with each mapped path can then be processed independently by independent prioritization classifiers. Independent processing of the paths as in the claimed invention allows for further prioritization to occur, allowing a mixture of low and high latency traffic streams potentially formed by different traffic types to be concurrently routed through a common switch fabric. By implementing a multi-dimensional traffic classification scheme using multiple orthogonal traffic classification methods, successively implemented for each traffic stream traversing the system, desired QoS can be achieved and undesirable variations in the speed with which the data can be transported across the switch can be controlled.

Applicant therefore submits that amended claims 1 and 18 present subject matter not taught or suggested by Aukia and therefore respectfully requests that the Examiner's rejection be withdrawn. As independent claims 1 and 18 present subject matter patentable over Aukia, dependent claims 3-9, 11-17, 20-23 and 25-28 should also likewise be deemed patentable.

Accordingly, it is respectfully submitted that the presently claimed invention is clearly distinguishable over the teaching over the cited reference. Thus it is believed that the patent application is in a condition for allowance and early action in that respect is courteously solicited.

Respectfully submitted,

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